

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method for recovering mesenchymal stem cells, comprising:
  - (a) providing a cell mixture comprising mesenchymal stem cells and other cells;
  - (b) seeding the mixture in a culture device that contains a comprising an upper plate having pores and a lower plate base, wherein the pore size is sufficient for separating mesenchymal stem cells do not pass through the pores and adhere onto the upper plate, from other cells and the other cells pass through the pores to the lower plate base; and
  - (c) recovering the mesenchymal stem cells from the upper plate.
2. (Cancelled).
3. (Previously presented) The method as claimed in claim 1, wherein the pore size ranges from about 0.4 to 40 microns in diameter.
4. (Currently amended) The method as claimed in claim 1, wherein the cell mixture comprises mammalian mesenchymal stem cells.
5. (Currently amended) The method as claimed in claim 4, wherein the mesenchymal stem cells are selected from the group consisting of fractioned tissue, un-fractioned tissue, and a body fluid.
6. (Currently amended) The method as claimed in claim 5, wherein the cell mixture comprises human mesenchymal stem cells.

7. (Previously presented) The method as claimed in claim 5, wherein the cells are selected from the group consisting of a bone marrow, an embryonic yolk sac, a placenta, an umbilical cord, a fetal, adolescent or adult body fluid, and a fetal, adolescent or adult tissue.

8. (Cancelled).

9. (Previously presented) The method as claimed in claim 1, wherein the mesenchymal stem cells are differentiable into tissues comprising bone, adipose, or cartilage.

10. (Previously presented) The method as claimed in claim 1, wherein the mesenchymal stem cells are characterized by CD 34<sup>-</sup>.

11. (Previously presented) The method as claimed in claim 9, wherein the mesenchymal stem cells are cultured in 10% fetal bovine serum-supplemented Dulbecco's modified Eagle's medium containing 1 g/L of glucose.

12. (Withdrawn) An isolated mesenchymal stem cell recovered by the method as claimed in claim 1, which has the capability of self-renewal and pluripotent differentiation.

13. (Withdrawn) The mesenchymal stem cell as claimed in claim 12, which can differentiate into tissues comprising bone, adipose, or cartilage.

14. (Withdrawn) The mesenchymal stem cell as claimed in claim 12, which is characterized by CD34<sup>-</sup>.

15. (Withdrawn) A composition comprising the mesenchymal stem cell as claimed in claim 12 and a culture medium, wherein the medium expands the mesenchymal stem cell.

16. (Withdrawn) The composition as claimed in claim 15, wherein the mesenchymal stem cell is characterized by CD34<sup>+</sup>.

17. (Withdrawn) The composition as claimed in claim 15, wherein the medium comprises DMEM-LG medium containing 10% fetal bovine serum.

18. (Withdrawn) A pharmaceutical composition comprising the mesenchymal stem cell as claimed in claim 12 and a pharmaceutically acceptable carrier, wherein the mesenchymal stem cell is present in an amount sufficient to serve as tissue replacement or gene therapy for tissues damaged by age, trauma, and disease.

19. (Withdrawn) The pharmaceutical composition as claimed in claim 18, wherein the mesenchymal stem cell can differentiate into tissues comprising bone, adipose, or cartilage.

20. (Withdrawn) The composition as claimed in claim 18, wherein the mesenchymal stem cell is characterized by CD34<sup>+</sup>.

21-22. (Cancelled).

23. (Previously presented) The method as claimed in claim 5, wherein the body fluid is a bone marrow aspirate.

24-31. (Cancelled).

32. (New) The method as claimed in claim 1, further comprising, after step (b), a step of removing cells not adhered on the upper plate by washing the plate with a culture medium.